

**I claim:**

1. A mobile storage device with a wireless Bluetooth module attached thereto comprising:

a memory control module electrically connected with at least a memory for storage of digital data;

an MP3 processing module electrically connected to said memory control module and having at least a first output signal line and a first input signal line and used to encode/decode data between a voice signal and an MP3 digital data;

a Bluetooth earphone module electrically connected to said memory control module and said MP3 processing module and capable of accomplishing wireless transmission of said digital data, said MP3 digital file or said voice signal with a remote device using the same frequency and channel, said Bluetooth earphone module having at least a second output signal line and a second input signal line; and

an electronic control switch electrically connected to said first output signal line, said second output signal line, said first input signal line and said second input signal line, said electronic control switch being also connected with at least an earphone and a microphone to switch said Bluetooth earphone module to transmit wirelessly digital data, switch said first output signal line or said second output signal line to connect electrically said earphone, or switch said first input signal line or said second input signal line to connect electrically said microphone.

2. The mobile storage device with a wireless Bluetooth module attached thereto

as claimed in claim 1 further comprising an outer shell, a display electrically connected to said MP3 processing module being provided on said outer shell, said display being used to display information of the MP3 digital file being played by said MP3 processing module.

5 3. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said memory electrically connected with said memory control module is a flash memory.

4. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said memory control module is a memory  
10 card reader, said memory is a memory card, and said memory card is movably inserted into said memory card reader for expansion or replacement of said memory card.

5. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said MP3 processing module is an MP3  
15 decoding chip capable of fetching an MP3 digital file from said memory and then decoding it into said voice signal outputted to said first output signal line, thereby forming an MP3 playback device.

6. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 5, wherein said MP3 processing module is further  
20 electrically connected with at least a playback key for controlling said MP3 processing module to play said MP3 digital file.

7. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 5, wherein said MP3 processing module is further electrically connected with a plurality of selection keys for selecting data in

said MP3 digital file to be played by said MP3 processing module.

8. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 5, wherein said MP3 processing module is further electrically connected with a plurality of volume keys for controlling the playback volume of said MP3 digital file.

9. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said MP3 processing module is an MP3 encoding chip capable of inputting said voice signal via said first input signal line and then encoding said voice signal into an MP3 digital file stored in said memory, thereby forming a recording device.

10. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 9, wherein said MP3 processing module is further connected with a recording key for controlling said MP3 processing module to record voice.

11. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said Bluetooth earphone module is further connected to said memory control module, said remote Bluetooth module is connected to a computer equipment, and said memory control module accomplishes wireless transmission of said digital data with said computer equipment through said Bluetooth earphone module.

12. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 11, wherein the digital data transmitted between said memory control module and said computer equipment is an MP3 digital file, and said MP3 digital file is directly stored into said memory.

13. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said Bluetooth earphone module is further connected to said MP3 processing module, said remote Bluetooth module is electrically connected to a mobile phone, and said Bluetooth earphone module achieves wireless connection with said mobile phone to answer said mobile phone.

14. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said Bluetooth earphone module is electrically connected to said MP3 processing module, said remote Bluetooth module is a Bluetooth earphone, and said Bluetooth earphone mobile accomplishes wireless connection with said Bluetooth earphone to listen to said voice signal.

15. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said Bluetooth earphone module is electrically connected to said memory control module, said remote Bluetooth module is a remote mobile storage device, and said Bluetooth earphone mobile accomplishes wireless connection with said remote mobile storage device for transmission of digital data between them.

16. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 15, wherein the digital data transmitted between said Bluetooth earphone module and said remote mobile storage device is an MP3 digital file, and the MP3 digital file is directly stored into said memory.

17. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said electronic control switch further

has a function key for switching functions of said electronic control switch.

18. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 1, wherein said electronic control switch is controlled by signals transmitted by said remote Bluetooth module to switch automatically functions of said electronic control switch.

19. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 18, wherein said remote Bluetooth module is connected to a mobile phone, and said remote Bluetooth module automatically controls said electronic control switch to switch said second output signal line to connect electrically said earphone and said second input signal line to electrically connect said microphone when said mobile phone has an incoming call.

20. The mobile storage device with a wireless Bluetooth module attached thereto as claimed in claim 19, wherein said remote Bluetooth module is connected to said mobile phone, and said remote Bluetooth module automatically controls said electronic control switch to switch said first output signal line to connect electrically said earphone and said first input signal line to electrically connect said microphone when the incoming call of said mobile phone is cut off.